Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

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Claim 1 (currently amended): An extensible file access method for accessing a foreign file system from a local data processing system with a native file system, said foreign file system being located on a remote data processing system, said foreign file system having a set of foreign file attributes corresponding to each of a plurality of files in the foreign file system, and said native file system having a set of native file attributes corresponding to each of a plurality of files in the native file system, said method comprising ~~the steps of~~:

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generating a request from a client on the local data processing system to the remote data processing system to open a foreign file in the foreign file system;

opening of the foreign file by the foreign file system;

sending of the file attributes of the foreign file, hereinafter foreign file attributes, to the local data processing system;

storing of the foreign file attributes by the local data processing system;

determining a subset of the foreign file attributes which are equivalent to a corresponding subset of file attributes of the native file system, the subset of the foreign file attributes hereinafter known as conventional file attributes;

returning the conventional file attributes to the client;

storing a remaining subset of the foreign file attributes which are not equivalent to a corresponding subset of file attributes of the native file system, the remaining subset of the foreign file attributes hereinafter known as extended file attributes;

accessing of the foreign file attributes stored in the local data processing system by the local data processing system client to process the foreign file; and

processing by the local data processing system client the foreign file using the stored foreign file attributes.

Claim 2 (canceled)

Claim 3 (currently amended): The method of claim 1 further comprising ~~the steps of~~:

accessing of the foreign file by the client via a protocol of the native file system, the accessing being performed in a similar manner to accessing a native file system file; and

accessing of the foreign file by the client by use of the extended file attributes, the accessing being performed via a protocol different from the native file system protocol.

Claim 4 (previously amended): The method of claim 1 wherein the storing step further comprises:

starting an expiration timer corresponding to the extended file attributes; and

removing the extended file attributes from the local data processing system storage after the expiration of the expiration timer.

Claim 5 (previously amended): The method of claim 1 wherein the sending of the foreign file attributes is performed by a web server located on the remote system, the web server being capable of sending and receiving messages via a network.

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Claim 6 (currently amended): The method of claim 1 further comprising ~~the steps of~~:

storing the extended file attributes in a shared memory portion of the local data processing system storage which is accessible by the client and other local data processing system processes;

associating a unique handle with the extended file attributes; and

providing the unique handle to a local data processing system process to enable the local data processing system process to access the extended file attributes.

Claim 7 (previously amended) An article of manufacture for use in a computer system for accessing a foreign file system from a local data processing system data processing system with a native file system, said foreign file system being located on a remote data processing system, said foreign file system having a set of foreign file attributes corresponding to each of a plurality of files in the foreign file system, and said native file system having a set of native file attributes corresponding to each of a plurality of files in the native file system, said article of manufacture comprising a computer-readable storage medium having a computer program embodied in said medium which causes the computer system to execute the method steps comprising:

generating a request from a client on the local data processing system to the remote data processing system to open a foreign file in the foreign file system;

opening of the foreign file by the foreign file system;

sending of the file attributes of the foreign file, hereinafter foreign file attributes, to the local data processing system;

storing of the foreign file attributes by the local data processing system;

determining a subset of the foreign file attributes which are equivalent to a corresponding subset of file attributes of the native file system, the subset of the foreign file attributes hereinafter known as conventional file attributes;

returning the conventional file attributes to the client;

storing a remaining subset of the foreign file attributes which are not equivalent to a corresponding subset of file attributes of the native file system, the remaining subset of the foreign file attributes hereinafter known as extended file attributes;

accessing of the foreign file attributes stored in the local data processing system by the local data processing system client to process the foreign file; and

processing by the local data processing system client the foreign file using the stored foreign file attributes.

Claim 8 (canceled)

Claim 9 (currently amended): The article of manufacture of claim 7 wherein the method steps further comprise ~~the steps of~~:

accessing of the foreign file by the client via a protocol of the native file system, the accessing being performed in a similar manner to accessing a native file system file; and

accessing of the foreign file by the client by use of the extended file attributes, the accessing being performed via a protocol different from the native file system protocol.

Claim 10 (previously amended): The article of manufacture of claim 7 wherein the storing step further comprises:

starting an expiration timer corresponding to the extended file attributes; and

removing the extended file attributes from the local data processing system storage after the expiration of the expiration timer.

Claim 11 (previously amended): The article of manufacture of claim 7 wherein the sending of the foreign file attributes is performed by a web server located on the remote system, the web server being capable of sending and receiving messages via a network.

Claim 12 (currently amended): The article of manufacture of claim 7 wherein the method steps further comprise ~~the steps of~~:

storing the extended file attributes in a shared memory portion of the local data processing system storage which is accessible by the client and other local data processing system processes;

associating a unique handle with the extended file attributes; and

providing the unique handle to a local data processing system process to enable the local data processing system process to access the extended file attributes.

Claim 13 (currently amended) A distributed computer system for accessing a foreign file system from a local data processing system with a native file system, said foreign file system being located on a remote data processing system, said foreign file system having a set of foreign file attributes corresponding to each of a plurality of files in the foreign file system, and said native file system having a set of native file attributes corresponding to each of a plurality of files in the native file system, said distributed computer system comprising:

a requestor for generating a request from a client on the local data processing system to the remote data processing system to open a foreign file in the foreign file system;

a foreign file which can be opened by the foreign file system;

a sender for sending the file attributes of the foreign file, hereinafter foreign file attributes, to the local data processing system;

storage for storing of the foreign file attributes by the local data processing system;

a comparator for determining a subset of the foreign file attributes which are equivalent to a corresponding subset of file attributes of the native file system, the subset of the foreign file attributes hereinafter known as conventional file attributes;

a data transfer for returning the conventional file attributes to the client; ~~and~~

storage for storing a remaining subset of the foreign file attributes which are not equivalent to a corresponding subset of file attributes of the native file system, the remaining subset of the foreign file attributes hereinafter known as extended file attributes;

a file access for accessing the foreign file attributes stored in the local data processing system by the local data processing system client to process the foreign file; and

a processor for processing by the local data processing system client the foreign file using the stored foreign file attributes.

Claim 14 (canceled)

Claim 15 (previously amended): The distributed computer system of claim 13 further comprising:

a file access for accessing by the client the foreign file via a protocol of the native file system, the accessing being performed in a similar manner to accessing a native file system file; and

a file access for accessing by the client the foreign file by use of the extended file attributes, the accessing being performed via a protocol different from the native file system protocol.

Claim 16 (previously amended): The distributed computer system of claim 13 wherein the storage further comprises:

an expiration timer corresponding to the extended file attributes; and

storage access for removing the extended file attributes from the local data processing system storage after the expiration of the expiration timer.

Claim 17 (previously amended): The distributed computer system of claim 13 wherein the sender of the foreign file attributes is a web server located on the remote system, the web server being capable of sending and receiving messages via a network.

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Claim 18 (previously amended): The distributed computer system of claim 13 further comprising:

a shared memory portion of the local data processing system storage which is accessible by the client and other local data processing system processes for storing the extended file attributes;

a unique handle associated with the extended file attributes; and

a local data processing system process which uses the unique handle to enable the local data processing system process to access the extended file attributes.